



Debt Instrument Rating Criteria Methodology

Table of Contents

1. Introduction.....	2
2. Rating Debt Instruments.....	3
3. Rating Sukuk.....	5
4. Rating Basel III Compliant Debt Instruments.....	6
5. Additional Considerations for Short-term Instruments.....	7
6. Role of Trustee/Investment Agent	7
7. Surveillance.....	8

Summary

PACRA's methodology documents lay out the umbrella framework guiding its credit ratings. This document describes PACRA's approach to rating various types of long-term and short-term debt instruments including Islamic debt instruments (Sukuk), conventional bonds, term finance certificates, Basel III compliant debt instruments and commercial paper. A debt instrument rating provides an opinion on the issuing entity's (hereon referred to as "issuer") ability to meet the financial obligations pertaining to the debt instrument on a timely basis.

Analyst Contacts

Zoya Aqib
+92-42-3586 9504
zoya.aqib@pacra.com

The Pakistan Credit Rating Agency Limited

Head Office

FB1 Awami Complex
Usman Block, New Garden Town
Lahore
Phone +92 42 3586 9504

Karachi Office

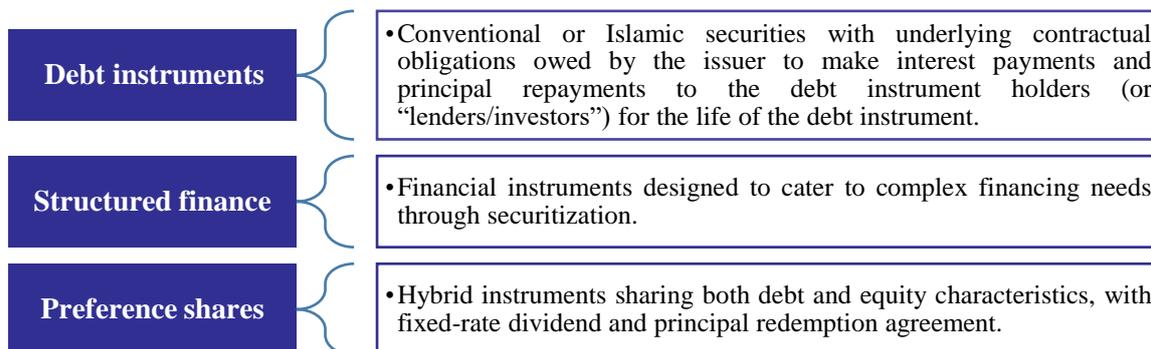
PNSC Building, 3rd Floor
M.T. Khan Road, Lalazar, Karachi
Phone +92 21 35632601

Disclaimer: PACRA has used due care in preparation of this document. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA shall owe no liability whatsoever to any loss or damage caused by or resulting from any error in such information. Contents of PACRA documents may be used, with due care and in the right context, with credit to PACRA. Our reports and ratings constitute opinions, not recommendations to buy or to sell.

1. Introduction

1.1 Debt Instrument Market: Pakistan has a relatively small debt instrument market. Financing through bank loans is the preferred route for corporates and utilization of capital markets to raise funding through debt instruments like bonds remains low. While the debt instrument market has shown near twofold growth in size over the past decade, it still mainly comprises plain-vanilla instruments secured by assets (usually fixed assets of the issuer), and is dominated by Sukuk issues (~80%) of which majority comprise public sector issues. Generally, investment in debt instruments is the domain of institutional investors in Pakistan while instrument denominations and tenor also remain on the lower side. Given relatively small base and held to maturity stance of most investors, secondary market is yet to evolve in a meaningful manner. Historically, in addition to a weak valuation mechanism for real estate, legal challenges faced by investors in exercising their right to collateral have been one of the major impediments in development of bond market. However, the rising number of commercial paper issues in recent years, setup of electronic trading platform for debt instruments and inclusion of banks as eligible market makers for debt instrument issues are some of the indicators of the debt instrument market’s improvement trajectory.

1.2 Types of Debt Instruments: Debt instruments can be differentiated on the basis of: (i) maturity (money market vs. capital market), (ii) markets in which they are issued (conventional vs. Islamic), (iii) marketability (listed vs. privately-placed), and (iv) structure (secured, unsecured or subordinated). This methodology covers various types of instruments including debentures stock, loan stock, bonds, notes, commercial paper, term finance certificates, sukuk, Basel III compliant debt instruments and other conventional or Islamic debt instruments. Meanwhile, structured finance and preference shares are covered under separate dedicated methodologies.



1.3 Regulatory Landscape: Issues of debt instruments are regulated primarily by the Securities and Exchange Commission of Pakistan (SECP). The regulator has designed a comprehensive set of laws and regulations in this regard. Debt instruments can be issued under: i) the trust structure i.e. through execution of trust deed and role of trustee, and ii) agency structure i.e. through execution of issuance agreement and role of investment agent.

❖ **[SECP] Structuring of Debt Securities Regulations’20:**

“Debt securities trustee” means a person licensed by the Commission under the [Securities] Act [2015] and appointed as Debt securities trustee by an Issuer through execution of Trust deed

“Trust deed” means a trust deed executed by an issuer in accordance with the provisions of the Trust Act.

“Investment agent” means an entity that holds a valid license to act as Consultant to the Issue under the Securities Act, 2015 and is appointed by the issuer through execution of issuance agreement

“Issuance agreement” means an agreement executed between the issuer and the investment agent for issuance of debt securities

2. Rating Debt Instruments

2.1 A debt instrument rating is an assessment of a specific debt issue of an entity and provides an opinion on the issuing entity’s ability to meet the financial obligations pertaining to the debt instrument, on a timely basis. For the purpose of the rating assessment, both the payment of interest and repayment of principal are considered “contractual obligations” by PACRA.

2.2 PACRA undertakes debt instrument ratings for all kinds of short-term and long-term instruments. For any given debt instrument rating, the entity rating of the issuer is used as a baseline (also called issuer rating). In case the issuer is unrated, PACRA first arrives at a shadow rating. The debt instrument rating is then “notched” either higher or lower compared to its corresponding issuer rating.

2.3 **Issuer Profile:** While forming an opinion on an issuer, PACRA evaluates the underlying entity as per the specific methodology applicable to it. For instance, for an industrial corporate issuer, Corporate Rating Methodology would apply, while, for an independent power producer, IPP Rating Methodology would be used to arrive at entity rating of the issuer. Broadly, the rating criteria applied is as follows:

Qualitative Factors for Issuer
Qualitative risk profile is assessed by soliciting information from client and direct interaction with sponsors, management, and/or directors and conducting a visit to plant site and head offices.
Profile: Studying the historical evolution of an entity and the nature, scale and diversity of its operations.
Ownership: Analyzing the legal structure and shareholding mix of an entity to determine the man at the last mile. Determining the skillset of the sponsor and sponsor’s willingness and ability to support the entity financially, if needed.
Governance: Studying the structure, quality, effectiveness and transparency of governance practices of an entity.
Management: Studying structure, quality, effectiveness and soundness of management personnel and systems of an entity.
Quantitative Factors for Issuer
Quantitative risk profile is assessed by looking at economic conditions, industry dynamics, and standalone performance of the issuer relative to peers – through financial statements, projections, financial strategy and cash flow analysis. This is very much numbers driven.
Business Risk: Study of the macroeconomic environment within which an entity operates, its current standing and level of competitiveness. Looking at the scale, stability and diversification of revenues, as well as key costs. Analyzing the impact of the aforementioned factors on financial performance and profitability of the entity and how it is likely to behave, going forward.
Financial Risk: Analyzing an entity’s financial profile with respect to working capital management, coverages and capitalization with the key objective of understanding the nature, volume and quality of the entity’s financial assets and liabilities and how well it is managing them.

2.4 **Instrument Rating Considerations:** The factors impacting notching of the debt instrument, relative to the issuer profile, are: i) relative seniority of the instrument compared to the issuer’s other obligations, and ii) presence of credit enhancement features. An instrument that carries a claim equal or superior to the issuer’s other obligations, is viewed positively from a rating perspective, compared to subordinated instruments. Notching impact may be negative, in case of the latter. The extent of negative notching for subordinated instruments (unless government-issued) is typically restricted to minus one notch.

2.5 **Credit Enhancements:** Presence of certain features may enhance the rating of a particular debt instrument relative to its issuer or its issuer’s other debt instruments. Some common examples of credit enhancement features include collateralization, cash collection mechanism and third party guarantees.

2.5.1 Collateralization: The collateral underlying a debt instrument may influence the extent of notching, provided that the terms of the issue allow for the liquidation of the collateral to making the missed payment/installment **before** an event of default is recognized. In such cases, PACRA looks at the following features of the collateral:

- Extent of coverage – the higher the coverage offered by the collateral compared to the debt obligation, the more favorable the notching impact. This is viewed in conjunction with the volatility in collateral value
- Liquidity/marketability – the higher the likelihood of the collateral being monetized in a timely manner with minimal premium, the more favorable the notching impact
- Nature of charge – exclusively held, earmarked collateral (preferably in favor of an independent third party usually the trustee/investment agent) is likely to lead to favorable notching impact

Collateralization over and above the outstanding instrument value, with assets that can be monetized before the due date for debt servicing by the issuer or trustee/investment agent in case the issuer misses a payment/installment, is considered superior and likely to result in higher notching. Provision of any upfront liquid asset/cash collateral may also warrant higher notching impact.

2.5.2 Cash Collection Mechanism: Debt instruments may be secured by a cash collection mechanism, whereby cash flows generated by the issuer are used to fund a debt service reserve, typically monitored by the trustee/investment agent. These cash flows may or may not emanate from earmarked assets (also referred to as “escrow mechanism”). In determining the impact of the cash collection mechanism on the credit rating of the instrument (if any), key factors to assess include:

- Cash source – greater comfort would be derived if the source of the cash is identified/earmarked
- Extent of coverage – a cash collection mechanism covering both principal and markup, and the longer the period of debt servicing covered by the cash collection mechanism, the higher the notching impact
- Replenishment mechanism – timely restoration of the reserve once it is utilized to make a payment and source of replenishment, is important. PACRA looks at the cushion in No. of days between the date of replenishment and payment date

2.5.3 Third Party Guarantees: The debt instruments that carry third party guarantee to make good the amount obligated to the lenders by the issuer may provide additional support to its rating. In determining the impact of a guarantee on the credit rating of the instrument (if any), key factors to assess include:

- Invocation of the guarantee – a pre-default guarantee invocation mechanism must be in place; PACRA does not consider post-default guarantees to be a credit enhancement from rating perspective
- Legal clauses – strong legal clauses pertaining to enforceability, irrevocability and unconditionality are expected
- Financial profile of the guarantor (or its credit rating, where available) having incorporated the burden of the guarantee into its debt profile – if the guarantors’ financial profile/credit rating is weaker than that of the issuer, it is unlikely to result in notching benefit¹
- Extent of coverage – a guarantee which does not cover all obligations of the instrument (partial guarantee), for its entire duration, is likely to result in limited notching benefit

Overall, the strongest form of guarantee is considered where the guarantee covers all obligations of an instrument for its entire tenure, with strong legal clauses and a well-defined invocation mechanism. In such

¹ Notching guidelines may vary across guarantees issued by corporate entities and financial institutions. For more detail on the same, please refer to PACRA’s Parent and Subsidiary Rating Linkage Methodology

cases, given that the financial profile/credit rating of the guarantor is stronger than that of the issuer, notching impact may constitute multiple positive notches and may also result in equalization of instrument rating with the credit rating of the guarantor.

2.5.4 Between the various types of credit enhancements, third party guarantees are generally likely to result in the highest positive notching impact. This is because other forms of credit enhancement, including collateralization and cash collection mechanism cannot fully be isolated from the issuer and remain vulnerable to changes in issuer’s operational viability and credit profile. Explicit third-party guarantees, meanwhile, provide supplementary support completely delinked from the issuer.

3. Rating Sukuk

3.1 Sukuk (plural of sakk – legal instrument), frequently referred as “Islamic bonds”, are certificates with each sakk representing a proportional undivided ownership right in tangible assets or business venture (Accounting and Auditing Organization for Islamic Financial Institutions - AAOIFI). Sukuk may take any mode of financing – Musharaka, Modarabah, Murabaha, Waqala, Salam, Istisna, Ijarah. Sukuk are either asset-based or asset-backed. Rating criteria differs for each type of Sukuk.

Distinguishing between Asset-based and Asset-backed Structures		
Sukuk Structure	Asset-based (Issuer-backed)	Asset-backed
Transaction	Assets are sold by issuer to the Sukuk holders with a promise to buy back	Identified assets are transferred to a separate entity that makes the sale to Sukuk holders and raises funds
Ownership of Asset	Beneficial ownership of asset with liquidation rights at par with other creditors	Legal ownership of assets with exclusive rights
Source of repayments	Issuer’s cash flows	Cash flows from underlying assets
Asset location	Asset stays on issuer’s balance sheet	Separate entity carries the asset
Credit Risk	Performance of issuer	Value and performance of underlying asset s
Event of Default	Recourse to issuer and underlying security if it is explicitly earmarked in favor of Sukuk holders	No recourse to issuer
Recovery	Sukuk holders’ rights are similar to unsecured creditors; subject to security structure	Claw back/liquidation of identified assets

3.1.1 Asset-based Sukuk: In an asset-based Sukuk issue, the issuer sells certain assets to Sukuk holders with a promise to buy these back in an agreed manner. Although an asset is used in the structure, it may not drive the return to Sukuk holders and the issuer’s promise is not entirely dependent on the performance of the underlying asset. The credit risk in an asset-based Sukuk terminates into the issuer of the Sukuk. This type of Sukuk is also commonly referred to as “issuer-backed Sukuk”. Globally, asset-based Sukuk structure is most preferred owing to ease in structuring of such instruments and expertise available to structure and market these Sukuk. Majority of Sukuk issued globally are asset-based.

3.1.2 Rating Asset-based Sukuk: In case of default of an asset-based Sukuk, Sukuk holders have recourse to the issuer and not the asset. Therefore, Sukuk holders would not have any preferential position and would stand along other unsecured creditors, in case of default. This structure is similar to that of conventional debt instruments described in Section 1, and PACRA’s assessment process and considerations are same as for debt instruments described in Section 1. PACRA’s starting point of assessment is the issuer’s credit profile, under the applicable methodology, following which the instrument rating is notched higher or lower based on i) relative seniority among other obligations, ii) presence of credit enhancement features.

3.2 Asset-backed Sukuk: This type of Sukuk provides separately identified ring-fenced assets to Sukuk holders and commitments to Sukuk holders are met through cash flows emanating from these assets. In case of deficiency in cash flows, Sukuk holders retain complete recourse to underlying assets but have no recourse beyond those assets to the issuer. Asset-backed Sukuk are rated under PACRA's Structured Finance Rating Methodology.

4. Rating Basel III Compliant Debt Instruments

4.1 Basel III debt instruments are issued by banks to enhance their capital adequacy. Basel III (BPRD circular #06 of 2013)² stipulates two main categories of capital: (1) Tier 1 (going concern capital), and (2) Tier 2 (gone concern capital). Tier 1 capital further consists of (i) Common Equity Tier 1 and (ii) Additional Tier 1. For the purpose of debt instrument rating, Additional Tier 1 (ADT1) and Tier 2 (T2) debt instruments are relevant.

4.2 Basel III Instrument Rating Considerations: As in case of other instrument ratings, PACRA first arrives at the entity rating of the issuer, in this case, using the Financial Institution Rating Methodology. In case the issuer is unrated, PACRA first arrives at a shadow rating. PACRA then evaluates the risks associated with the instrument in line with its unique and respective criteria as per BPRD guidelines, the structure of the instrument and its intended purpose when forming a view on the rating.

4.2.1 Priority Order: PACRA takes into account the priority and level of subordination of the instrument, and incorporates the same into its rating opinion. The conditions specified in BPRD circular #06, amongst others, clearly indicate that T2 instruments are inferior to issuer rating and T1 instruments are inferior to T2 and issuer rating both. This is termed "priority order" and hence forms a crucial part in determining the final rating of the instrument.

4.2.2 Non-performance Risk Assessment: Non-performance risk is the risk that the issuer will not be able to meet the contractual obligations and hence other related clauses would kick in. PACRA opines non-performance as the prime risk because non-performance on the contractual obligations essentially means that "priority order" would not be triggered. PACRA believes that the futuristic performance of the issuer, and the bank's management and planning play a crucial role in performance risk, and hence, sustainability of the risk profile of the instrument. Hence, apart from assessing the credit profile of the issuing bank, PACRA considers:

- i. Future profitability of the bank, providing internal capital and cushion to the risk absorption capacity of the bank
- ii. Cushion that a bank maintains in its CET1 (including capital conservation buffer) on a sustainable basis over the regulatory requirement prescribed by State Bank of Pakistan.
- iii. Management plan to maintain and adhere to the cushion in its CET1 ratio.

Meanwhile, PACRA also takes into account entity's projections for growth vis-à-vis regulatory capital adequacy:

- i. Capital Adequacy Ratio (CAR) of the bank
- ii. Composition of the CAR including the CET-I, ADT-I and Tier-II
- iii. The rate of consumption of the CAR along with future forecasts.

4.3 The following table outlines the typical notching impact for Tier 1 and Tier 2 instruments. In certain cases, PACRA's ratings may differ from the notching guidance specified in the table. This is possible in cases where "non-performance" is deemed to be essentially non-existent, especially in case of "AAA" (Triple A) rated financial institutions. Such high-rated banks typically have a history of strong equity base and steady profitability. Thereby, the risk of non-performance decreases inversely proportionate to their rating at the higher end of spectrum, reducing the riskiness of their instruments. Thus, in these cases,

² Link to BPRD Circular # 6 of 2013: https://dnb.sbp.org.pk/bprd/2013/Basel_III_instructions.pdf

PACRA is not strict on priority. Meanwhile, such comfort may also be available whereby PACRA is able to establish that some form of credit enhancement would avert “non-performance”.

Instrument Type	Likely Notching Impact
ADT1	0,-1,-2
T2	0,-1

5. Additional Considerations for Short-term Instruments

5.1 Additional Considerations: PACRA’s approach to rating short-term debt instruments is similar to that used for long-term debt instruments. However, two factors are given more emphasis when rating short-term debt instruments, namely: i) short-term liquidity position, and ii) financial flexibility of issuer.

5.1.1 Short-term Liquidity Position: When assessing liquidity, PACRA focuses mainly on the cash flow and working capital management of the entity to assess repayment ability. In addition to this, availability of unencumbered liquid investments and/or other liquid current assets ensures a cushion for urgent cash in stressed times. Meanwhile, in case of rollover instruments, a longer-term view is incorporated into the rating opinion.

5.1.2 Financial Flexibility: Financial flexibility allows an entity the latitude to meet its debt service obligations and manage stress without eroding credit quality. While one aspect of financial flexibility is an entity’s capital structure (thoroughly assessed during long-term rating assignment), alternative sources include support available from sponsor (in the form of a line of credit, or otherwise) and commercial credit lines available to the entity.

5.2 Linkage between Short-term and Long-term: When assessing an issuer’s liquidity profile, some temporary features may appear to skew the short-term rating for an issuer due to cyclical or seasonality within a given industry or sector. Thus, PACRA focuses on the sustainable liquidity profile of an issuer and cushion available in period of low liquidity. Herein, long-term credit quality plays a key role, thus creating a linkage between short-term and long-term ratings. This is due to two main reasons. Firstly, an entity with higher long-term credit quality has a stronger ability to refinance, and/or gain access to other sources of funding. Secondly, many short-term instruments tend to get rolled over and, therefore, call for a longer-term rating view. Thus, long-term ratings cannot be disregarded when assigning short-term ratings.

6. Role of Trustee/Investment Agent

6.1 Trustees and/or investment agents play key roles and duties in monitoring of debt instruments, comprehensively covered in the Structuring of Debt Securities Regulations 2020. Trustees’ and investment agents’ responsibilities include: i) overseeing payments to investors, ii) ensuring arrangement and maintenance of security/collateral (if applicable) throughout the tenure of the issue, iii) ensuring information symmetry between the issuer and investors, iv) ensuring compliance with the terms and covenants of the trust deed/issuance agreement, and v) initiating legal proceedings in the event of default, among other responsibilities. When looking at the trustee/investment agent, PACRA evaluates: i) independence, and ii) terms/covenants of the trust deed/issuance agreement.

7. Surveillance

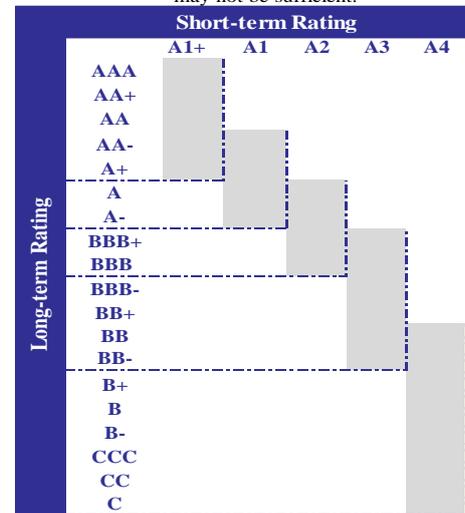
7.1 Once a debt instrument is issued, PACRA undertakes a formal review once in every six months. Surveillance frequency may be higher depending on payment terms, frequency of payments and other unique characteristics of a particular issue. PACRA also establishes relationship with the trustee/investment agent and/or issuer of the debt instrument to remain updated on all information pertaining to the rating of the instrument.

Credit Rating

Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

Scale	Long-term Rating Definition
AAA	Highest credit quality. Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments
AA+	
AA	Very high credit quality. Very low expectation of credit risk. Indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
AA-	
A+	
A	High credit quality. Low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be vulnerable to changes in circumstances or in economic conditions.
A-	
BBB+	
BBB	Good credit quality. Currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity.
BBB-	
BB+	
BB	Moderate risk. Possibility of credit risk developing. There is a possibility of credit risk developing, particularly as a result of adverse economic or business changes over time; however, business or financial alternatives may be available to allow financial commitments to be met.
BB-	
B+	
B	High credit risk. A limited margin of safety remains against credit risk. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.
B-	
CCC	
CC	Very high credit risk. Substantial credit risk "CCC" Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. "CC" Rating indicates that default of some kind appears probable. "C" Ratings signal imminent default.
C	
D	Obligations are currently in default.

Scale	Short-term Rating Definition
A1+	The highest capacity for timely repayment.
A1	A strong capacity for timely repayment.
A2	A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.
A3	An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial
A4	The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions. Liquidity may not be sufficient.



*The correlation shown is indicative and, in certain cases, may not hold.

Outlook (Stable, Positive, Negative, Developing) Indicates the potential and direction of a rating over the intermediate term in response to trends in economic and/or fundamental business/financial conditions. It is not necessarily a precursor to a rating change. 'Stable' outlook means a rating is not likely to change. 'Positive' means it may be raised. 'Negative' means it may be lowered. Where the trends have conflicting elements, the outlook may be described as 'Developing'.

Rating Watch Alerts to the possibility of a rating change subsequent to, or, in anticipation of some material identifiable event with indeterminable rating implications. But it does not mean that a rating change is inevitable. A watch should be resolved within foreseeable future, but may continue if underlying circumstances are not settled. Rating watch may accompany rating outlook of the respective opinion.

Suspension It is not possible to update an opinion due to lack of requisite information. Opinion should be resumed in foreseeable future. However, if this does not happen within six (6) months, the rating should be considered withdrawn.

Withdrawn A rating is withdrawn on a) termination of rating mandate, b) the debt instrument is redeemed, c) the rating remains suspended for six months, d) the entity/issuer defaults., or/and e) PACRA finds it impractical to surveil the opinion due to lack of requisite information.

Harmonization A change in rating due to revision in applicable methodology or underlying scale.

Surveillance. Surveillance on a publicly disseminated rating opinion is carried out on an ongoing basis till it is formally suspended or withdrawn. A comprehensive surveillance of rating opinion is carried out at least once every six months. However, a rating opinion may be reviewed in the intervening period if it is necessitated by any material happening.

Note. This scale is applicable to the following methodology(s):

- a) Broker Entity Rating
- b) Corporate Rating
- c) Debt Instrument Rating
- d) Financial Institution Rating
- e) Holding Company Rating
- f) Independent Power Producer Rating
- g) Microfinance Institution Rating
- h) Non-Banking Finance Companies Rating

Disclaimer: PACRA has used due care in preparation of this document. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA shall owe no liability whatsoever to any loss or damage caused by or resulting from any error in such information. Contents of PACRA documents may be used, with due care and in the right context, with credit to PACRA. Our reports and ratings constitute opinions, not recommendations to buy or to sell.